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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,198	11/17/2003	Yanien Lee	P27,138 USA	3354

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EXAMINER

SAYALA, CHHAYA D

ART UNIT PAPER NUMBER

1761

DATE MAILED: 09/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/715,198	Applicant(s) LEE ET AL.	
	Examiner C. SAYALA	Art Unit 1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brunner (us Patent 6254920) or Lin et al. (US 2005/0037108) in view of Todd, Jr (US Patent 6099879) and Buckholz, Jr et al. (US Patent 4514431) and further in view of Gierhart et al.(US Patent 5186964), Majlinger (US Patent 4215149) and Scaglione (US Patent 5015485).

Brunner teaches a palatability enhancing composition that includes 0.1-99% by weight of tetra sodium pyrophosphate so that the palatability enhancer is from about 0.5% to about 3% by weight of the finished cat food product. The basal formula of the pet food contains meat product: fish products etc. See col. 3, lines 5-15 in '484 and col. 3, lines 5-11 in '920. The palatability enhancer is applied to dry and semi-dry pet food, including cat food. Other liquids such as citric acid and phosphoric acid may also be applied to the particles or pieces of food and the palatability enhancer, then sprayed or dusted. See col. 4, lines 25-35 ('485) and col. 5, lines 30-40 ('920).

Lin et al. teach palatability enhancing composition for dry and semi-dry cat food, which contains tetra potassium pyrophosphate between 0.1-1.0% by weight of finished pet food, as well as dry and semi-dry cat foods. The palatability enhancer in a dry

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composition including from about 0.1% up to about 99.0% by weight (see paragraphs [0013 and [0020]). See paragraph [0005], which teaches that meat and fish products. See paragraph [0024], which teaches using other liquids, such as citric acid and phosphoric acid, on the dried pieces of food and then spraying or dusting the phosphate on the pieces.

The patents do not teach the pH limitations, although they teach the addition of citric acid and phosphoric acid, and tripolyphosphate.

Todd, Jr. teaches that tripolyphosphate together with ascorbic acid or citric acid enhances flavour of meat and meat by-products. See abstract.

Similarly, Buckholz, Jr. et al. also teach tripolyphosphate as one of the constituents that enhance palatability of foodstuff. See col. 5, lines 43-53.

Gierhart et al. is directed to a palatability enhancing composition for pet food composition, which includes organic acid and phosphoric acid. In col. 1, line 42, the patent reviews prior art by pointing out that phosphoric acid has been used as a palatability enhancer by coating dry coat food. Synergistic mixtures of phosphoric acid and citric acid also have been used as a coating for flavor. At col. 3, the patent teaches acids, such as citric acid, and also phosphate salts such as calcium, sodium and potassium polyphosphates.

Majlinger at col. 1 teaches that the pH of the pet food is lowered to inhibit bacterial decomposition (see lines 50-55), and to hydrolyze proteinaceous materials to increase flavor. The palatability improvers may be added to dry or semi-dry pet foods being sprayed thereon. At col. 2, the patent cites prior art of Mohrman et al. that also

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teaches using citric acid or phosphoric acid as flavor- enhancer, as well as Kealy that also teaches a flavor enhancing mixture of phosphoric acid and citric acid. In general, cats are said to prefer foods wetted with acid, and the degree of acceptance of such foods is to a greater degree. Because of the corrosivity of acids, the patent of Majlinger recommends the use of phosphate salts on the surface of the food to enhance flavor.

Based on such copious prior art disclosure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the pyrophosphates with tripolyphosphates and to use acids to lower the pH, for the reasons given by prior art as delineated above. Also, it is known in the art that the addition of pyrophosphates to coating solutions give a pH of about about 4 to about 10.5. See Scaglione et al. at col. 11, lines 55+. Note that prior art has established that it is the phosphate ion that increases flavor or palatability. Basic chemistry teaches that the polyphosphates are a homologous series with a general formula $[P_nO_{3n+1}]^{n+2}$, where $n=2$, is the pyrophosphate ($P_2O_7^{4-}$) and $n=3$ is the tripolyphosphate ($P_3O_{10}^{5-}$). Therefore, one of ordinary skill in the art, based on Brunner and Gierhart et al. would have reasonably expected that the tripolyphosphate also to function as a palatability enhancer in the same manner as the pyrophosphate, which is the simplest polyphosphate of the homologous series.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. SAYALA whose telephone number is 571-272-1405.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


C. SAYALA
Primary Examiner
Group 1700.